

adjustable in size and position; and that a control unit is provided for controlling the movements of the orthotic device and controlling the speed of the treadmill.

58 2. (Amended) Apparatus as claimed in Claim 1, wherein a parallelogram that is fixed in a height-adjustable manner on the railing of the treadmill is provided as a mean for stabilizing the orthotic device.

58 3. (Amended) Apparatus as claimed in Claim 2, wherein the parallelogram consists of a base frame, an orthotic device part, and two carriers that are interconnected via bearings; that on the base frame, on the one lower side, a first bearing element is attached, with which first bearing element the base frame or, respectively, the parallelogram is positioned in a rotatable manner and is fixed on the first rail of the treadmill in a height-adjustable manner; that on the base frame on the other lower side a second bearing element that can be flipped open and closed is attached, with which second bearing element the base frame or, respectively, the parallelogram can be locked to the second rail of the treadmill after the completed rotating movement around the first bearing element; and that an orthotic device holder that is provided with means for attaching the orthotic device is attached to the orthotic device part.

4. (Amended) Apparatus as claimed in Claim 2, wherein a relief mechanism is attached to the parallelogram for compensating the weight of the orthotic device, whereby

continued on page 2

preferably a gas pressure spring, a counter weight, or a mechanical spring is provided for this purpose.

*Specs*  
5. (Amended) Apparatus as claimed in Claim 1, wherein as a mean<sup>s</sup> for stabilizing the orthotic device, a rod that is attached (to it) has been provided, said rod being guided in a guide pipe which again is attached in a drivable manner to (the ceiling), whereby a roller guide with rollers that is guided in guide tracks has been provided for forward, backward and sideward stabilization.

6. (Amended) Apparatus as claimed in Claim 1, wherein the hip orthotic device is adjustable in its width.

7. (Amended) Apparatus as claimed in Claim 1, wherein the leg parts consist of leg braces that can be moved inside each other so that the leg parts are adjustable in length.

8. (Amended) Apparatus as claimed in Claim 1, wherein the leg parts are provided with cuffs that can be adjusted continuously 'anterior-posterior' and 'medial-lateral'.

9. (Amended) Apparatus as claimed in Claim 1, wherein the cuffs consist of a semi-round hoop and a tape; and that the tape is attached to the hoop in such a way that it can be freely wound around a rotary axis in the center of the patient's leg.

10. (Amended) Apparatus as claimed in Claim 9, wherein the different settings of the orthotic device, such as hip width, leg lengths, and cuff positions, are marked with marks.

11. (Amended) Apparatus as claimed in Claim 1, wherein a control unit is provided for controlling the drives of the orthotic device, the input values of said control unit being user data, the output values being control signals for the orthotic device and the treadmill, and its control value being measuring values.

12. (Amended) Apparatus as claimed in Claim 1, wherein a ball screw spindle drive is provided for each knee drive and hip drive.

13. (Amended) Method for operating an apparatus as claimed in Claim 1, wherein the orthotic device is turned away from the treadmill in order to permit the patient to gain access to the treadmill; that the orthotic device is positioned above the treadmill and is fixed to the patient, whereby the orthotic device is relieved by a relief mechanism; and that the orthotic device is driven and controlled, and the treadmill is driven and controlled.

Brook

14. (Amended) Method as claimed in Claim 13, wherein the parallelogram is positioned with the orthotic device at the railing of the treadmill in such a way that it can be opened towards the back, whereupon the patient is (driven in (the) wheel chair) onto the treadmill; that the patient is secured in the treadmill belt or hung above the treadmill; and that then the orthotic device is rotated from the back at the parallelogram onto the treadmill and is tightened on the suspended patient.

15. (Amended) Method as claimed in Claim 13, wherein the drives of the orthotic device are controlled by a control unit in such a way that the legs of the patient are moved in a natural, physiological walking pattern on the treadmill, whereby the desired curves necessary for creating the physiological sequences of movement are adapted by the control unit based on the entered patient-specific settings and respective measuring values. ?

16. (Amended) Method as claimed in Claim 13, wherein the movements of the orthotic device are synchronized with the treadmill speed.

17. (Amended) Method as claimed in Claim 13, wherein the control unit synchronizes the movement of the legs with or adapts it to the speed of the treadmill in that a trigger unit signals the beginning of a standing phase and thus the course of the sequence of movements over time with a trigger signal, and the desired curves are output to the drives of the orthotic device, adapted appropriately as control signals.

R'  
conc'd

18. (Amended) Method as claimed in Claim 13, wherein the settings of the adjustable orthotic device are read at the markings, are stored, and reconstructed.

---

RECEIVED

T